

=> file ca

09/940, 550

6/2/03

=> s (recombinase?(10a)(inducib?(2a)promoter?))/ab,bi

CAS
Bios

L1 29 (RECOMBINASE?(10A)(INDUCIB?(2A)PROMOTER?))/AB,BI

=> file biosis

=> s l1

L2 10 (RECOMBINASE?(10A)(INDUCIB?(2A)PROMOTER?))/AB,BI

=> dup rem

L3 29 DUP REM L1 L2 (10 DUPLICATES REMOVED)

=> d l3 1-29 ti py

=> d l3 27

L3 ANSWER 27 OF 29 CA COPYRIGHT 2003 ACS

AN 125:319245 CA

TI Modifications of genomic DNA by FLP site specific ***recombinase***
under the control of ***inducible*** ***promoters*** in maize and
rice

AU Lyznik, L. A.; Kononowicz, H.; Hodges, T. K.

CS Department Botany and Plant Pathology, Purdue University, West Lafayette,
IN, USA

SO Induced Mutations and Molecular Techniques for Crop Improvement,
Proceedings of an International Symposium on the Use of Induced Mutations
and Molecular Techniques for Crop Improvement, Vienna, June 19-23, 1995
(1995), 582-589 Publisher: International Atomic Energy Agency, Vienna,
Austria.

CODEN: 63NLAP

DT Conference

LA English

=> d l3 27 ab

L3 ANSWER 27 OF 29 CA COPYRIGHT 2003 ACS

AB Methods for using the flp recombinase in the induction of mutation in
plant cells by recombination at FRT sites scattered throughout the genome
are described. The flp recombinase gene is placed under control of a
regulatable promoter to regulate recombination. The use of a regulated
flp gene to control induction of a .beta.-glucuronidase gene is
demonstrated.

=> d l3 ab 15-18 22 23 25 29

L3 ANSWER 16 OF 29 CA COPYRIGHT 2003 ACS

DUPLICATE 7

AB Stably transformed Arabidopsis lines in which GUS marked cell clones are
readily produced in response to heat-shock have been established and
characterized. Control of GUS activation is achieved by
heat-shock-induced FLP recombinase activity which switches on expression
of a GUS marker gene previously held transcriptionally silent. To obtain
efficient GUS sectoring, single insert Arabidopsis lines carrying FLP
recombinase under the control of a heat-shock- ***inducible***
promoter and an FLP-activatable GUS construct were generated.

Anal. of GUS sectoring in lines hemizygous and homozygous for both inserts was conducted after various regimes of heat-shock were given at various developmental stages. It is shown that GUS sectoring events can be efficiently induced in most vegetative, aerial and sexual structures in Arabidopsis. Furthermore, the frequency of sectoring events, sector size and, to some extent, the tissues in which sectors are generated can be readily controlled by choice of the conditions and timing of heat-shock used.

L3 ANSWER 17 OF 29 CA COPYRIGHT 2003 ACS

AB Methods for producing a transgenic cell having a stably integrated, single copy of an exogenous polynucleotide sequence from complex integration patterns using site-specific recombination mechanisms are described. Complex integration events can lead to disruption of the integrating gene or homol.-dependent gene silencing. The integrating transforming DNA has the functionally important region flanked by recombination sites oriented to avoid excision of the intact gene by the action of the cognate recombinase. Upon exposure to a recombinase recognizing the recombination sites, multiple tandem integrations are resolved to a single copy. Use of the method in the construction of transgenic wheat is demonstrated. A bialaphos-resistant wheat line expressing the cre recombinase gene was constructed and crossed with plants carrying a bar gene conferring resistance to bialaphos and flanked by a pair of loxP sites and having a different restriction pattern. Progeny that retained bialaphos resistance had the bar gene restriction pattern of cre parent with the other showing a change in restriction pattern consistent with excision at the loxP sites. In addn., a complex hybridization pattern typical of multiple integrations was resolved into a single band with the copy no. of the band was lowered, most often to a single copy.

=> d 13 16 17 25

L3 ANSWER 16 OF 29 CA COPYRIGHT 2003 ACS

DUPLICATE 7

AN 133:115686 CA

TI Controlled induction of GUS marked clonal sectors in Arabidopsis

AU Kilby, Nigel J.; Fyvie, Mark J.; Sessions, R. Allen; Davies, Gareth J.; Murray, James A. H.

CS Institute of Biotechnology, University of Cambridge, Cambridge, CB2 1QT, UK

SO Journal of Experimental Botany (2000), 51(346), 853-863

CODEN: JEBOA6; ISSN: 0022-0957

PB Oxford University Press

DT Journal

LA English

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 29 CA COPYRIGHT 2003 ACS

AN 130:333728 CA

TI Use of site-specific recombination in the resolution of complex integration patterns to obtain single integrated copies of transgenes

IN Ow, David W.; Srivastava, Vibha

PA United States Dept. of Agriculture, USA; The Regents of the University of California

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI WO 9923202 A1 19990514 WO 1998-US23154 19981030
 US 6114600 A 20000905 US 1998-175219 19981019
 AU 9912941 A1 19990524 AU 1999-12941 19981030
 PRAI US 1997-63886P P 19971031
 US 1998-175219 A 19981019
 WO 1998-US23154 W 19981030

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 25 OF 29 CA COPYRIGHT 2003 ACS

AN 127:327456 CA

TI Regulated excision of a target gene from the transformation vector in the recipient cell using a site-specific recombinase

IN Surin, Brian Peter; De Feyter, Robert Charles; Graham, Michael Wayne; Waterhouse, Peter Michael; Keese, Paul Konrad; Shahjahan, Ali

PA Commonwealth Scientific and Industrial Research Organisation, Australia; The Australian National University; Surin, Brian Peter; De Feyter, Robert Charles; Graham, Michael Wayne; Waterhouse, Peter Michael; Keese, Paul Konrad; Shahjahan, Ali

SO PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

App subm. Hcd

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9737012	A1	19971009	WO 1997-AU197	19970327
	CA 2250111	AA	19971009	CA 1997-2250111	19970327
	AU 9721437	A1	19971022	AU 1997-21437	19970327
	AU 717267	B2	20000323		
	EP 922097	A1	19990616	EP 1997-913984	19970327
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	NZ 331940	A	20000228	NZ 1997-331940	19970327
	JP 2000507446	T2	20000620	JP 1997-534743	19970327
	US 2002147168	A1	20021010	US 2001-850846	20010507
PRAI	AU 1996-9031	A	19960329		
	WO 1997-AU197	W	19970327		

=> log y

```
=> file ca

=> s (recombinase?(10a)intron?)/ab,bi

L1          16 (RECOMBINASE?(10A)INTRON?)/AB,BI

=> file biosis

=> s l1
L2          10 (RECOMBINASE?(10A)INTRON?)/AB,BI

=> dup rem
L3          22 DUP REM L1 L2 (4 DUPLICATES REMOVED)

=> d l3 ti py 1-22

=> d l3 ab bib 13 14 20 22
=> file ca
```

```
=> s ebinuma/au
L4          1 EBINUMA/AU

=> s ebinuma, h?/au
L5          99 EBINUMA, H?/AU

=> s l5 and recombinase?/ab,bi
          2157 RECOMBINASE?/AB
          2461 RECOMBINASE?/BI
L6          2 L5 AND RECOMBINASE?/AB,BI
```

```
=> file biosis
```

```
=> s l6
L7          1 L5 AND RECOMBINASE?/AB,BI
```

```
=> dup rem
L8          2 DUP REM L6 L7 (1 DUPLICATE REMOVED)
```

```
=> d l8 ti py
```

```
=> d l8 2 ti py
```

```
=> d l8 2 ab bib
```

```
AN  134:217745  CA
TI  A transformation vector for the production of marker-free transgenic
    plants containing a single copy transgene at high frequency
AU  Sugita, Koichi; Kasahara, Takehide; Matsunaga, Etsuko; ***Ebinuma,***
    *** Hiroyasu***
CS  Wood-Biotechnology, Nippon Paper Industries Co Ltd., Tokyo, 114-0002,
    Japan
SO  Plant Journal (2000), 22(5), 461-469
    CODEN: PLJUED; ISSN: 0960-7412
PB  Blackwell Science Ltd.
DT  Journal
LA  English
```